



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,849	09/11/2003	Kenneth R. Seymour II	D5413	5535

30409 7590 12/16/2004

INTERNATIONAL ENGINE INTELLECTUAL PROPERTY COMPANY  
4201 WINFIELD ROAD  
P.O. BOX 1488  
WARRENVILLE, IL 60555

EXAMINER
----------

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/659,849

Applicant(s)

SEYMOUR ET AL.

Examiner

James M Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 9/11/03 and 10/17/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/11/03 & 10/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because on line 2, "that" should be inserted before "may" and on line 4, "described" should be deleted. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 1-10 are objected to because of the following informalities:

In claim 1 line 9, "the actuator cavity" lacks antecedent basis.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9, 11-15, 17-18, 20-24, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Highlen (US 5,570,910).

As is clearly evidenced in Figures 1-9, Highlen discloses all the limitations of claims 1-7, 9, 11-15, 17-18, 20-24, and 26-27. The treatment of the limitations "wherein the actuator is in closer proximity to the male member than to the female member when

Art Unit: 3679

the male member, the female member, and the release collar are engaged” and “wherein the actuator has a thickness that is substantially less than a radial distance between an inner release surface of the female member and an outer release surface of the male member” should be explained however. Regarding the first-mentioned limitation, refer to Figure 9, wherein the actuator (36) is in contact with and thus in closer proximity to the male member than to the female member at the leading edge (38) of the actuator. Also, it stands to reason that since the release collar is affixed about the male member so as not to easily be dislodged therefrom, that the male member and the actuator are in contact about at least a portion of the inner circumference of the actuator, thus making the actuator in closer proximity to the male member than to the female member, even when the male member, female member, and collar are engaged, as in Figures 7-9. Regarding the second-mentioned limitation, from Figures 7-9, it is apparent that the radial thickness of the actuator is at the most only half as thick as the distance between an inner release surface of the female member and an outer release surface of the male member.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3679

Claims 8, 10, 16, 19, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Highlen (US 5,570,910) in view of Karl et al (US 5,553,895).

Highlen teaches all the limitations of claims 8, 10, 16, 19, 25, and 28, except that the actuator comprises a plurality of fingers. In Figure 5, Highlen shows that his actuator includes a slot. Karl et al teaches a similar coupling assembly comprising a release collar having an actuator comprising a plurality of fingers defined by slots (37), as shown in Figure 6. In view of Karl et al's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Highlen's actuator with a number of slot to define a plurality of fingers in order to enhance the resiliency of the actuator.

### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 703-308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JAMES M. HEWITT**  
**PRIMARY EXAMINER**